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VOL. 31 NO. 1

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Soil Conservation

DEVOTED TO THE WISE USE OF LAND AND WATER RESOURCES

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AGRICULTURE AND THE LANDSCAPE *Page 19*

SOIL CONSERVATION SERVICE U. S. DEPARTMENT OF AGRICULTURE

Soil Conservation

Devoted to the wise use of land and water resources

AUGUST 1965 VOL. 31, NO. 1

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Land . . .

This issue of *Soil Conservation* begins a new volume—our thirty-first.

A generation of growth has carried the conservation movement beyond our original objective of soil erosion control. We are concerned now with all the related resources that comprise the landscape as a whole—soil, water, plants, and animals—in productive and pleasing combinations for the use of people.

So we take this occasion to add the line, "Devoted to the wise use of land and water resources," to our logotype.

Plants: SCS's far-flung search for conservation plants takes a new turn with the current interest in recreational and esthetic values in land use. Plant materials specialists tallied an imposing list of examples for Don Douglas' roundup (p. 3) of contributions in the making and already made to landscape beautification.

Jobs: Play makes work, rural communities are finding as land owners put their acres to recreational use. Our man in the Northeast, Les Fox, gives us a hearty sampling (p. 6) of new recreation jobs in that region.

Cover: A quarter-mile of rose hedge surrounds a 2-acre pond and grass covers the dam to make a pleasing setting for a family outing on the Edward L. Kothe farm in the Randolph Soil Conservation District, Ill.

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Cardinal autumn-olive produces an abundance of fruits for song and game birds. It has attractive form and interesting gray-green foliage.

Conservation Plants For New Land Uses

Landscape beauty and recreation take priority in today's search for improved plant materials

By Donald S. Douglas
Plant Materials Specialist, SCS, Washington, D. C.

TODAY's changing agriculture requires imaginative new uses of land and plants.

While soil conservationists spend an increasing portion of their time helping landowners plan new recreation areas and wildlife habitats to replace crop fields and pastures, a corps of SCS plant materials specialists, working with State experiment stations and colleges, are coming forth with new plants to meet the specialized needs of the new enterprises.

And new ways of using old plants are finding important places for them in rural landscapes managed for enjoyment as well as production.

The early work of SCS plant materials centers was aimed largely at producing improved forage plants that would give both soil protection and profitable production on specific sites. Out of these efforts came such now-well-known grasses as the southern bromes for the Corn Belt, Kentucky 31 tall fescue for the Southeast, and Manchar smooth brome for the Northwest—these and others that made possible a grassland revolution in American agriculture.

For the special needs of the wind-whipped Great Plains, the plant materials centers found adapted shrubs and trees for shelterbelts and developed strains of native grasses for seeding rangeland.

They introduced and tested specialized plants to solve many spectacular and different conservation problems and encouraged commercial growers and nurserymen to produce the seed and plants.

Alkar tall wheatgrass, for example, did well on saline land, Emerald crownvetch on roadsides, and Ioreed canarygrass on streambanks. American beachgrass and European beachgrass were introduced to common use to protect coastal dunes.

Now the values of wildlife and recreation for profit and the objective of beautifying the landscape in every direction are given high priority. These purposes require the adaptation of plants to new uses and the search for new sources of plant materials.

An early product of this search was Sodar wheatgrass, developed in the West as a low-growing drought-tolerant turf grass for roadside planting, farm airports, and dryland lawns. Durar hard fescue is a tufted, fine-leaved grass similar to chewing fescue but more drought tolerant and shade tolerant. When used on roadsides, for recreation area turf, or as a companion grass with alfalfa, it makes a good ground cover and keeps out weeds. When used as a turf, it produces long lax leaves and few seed heads. It is a heavy producer of fibrous roots, holding the soil firmly in place.

Two new forage plants that are

Chemung crownvetch covers raw strip-mine spoil in West Virginia. Later in the season this legume becomes a colorful mass of pinkish bloom.

proving of value for big game in the Northwest are Cicar milkvetch and Onar sainfoin. Elk and deer prefer them to alfalfa for grazing.

Several plant materials centers are working cooperatively with State game departments testing food plants for waterfowl and upland birds.

They have developed a technique of planting switchgrass providing release cover for birds on shooting preserves in the Northeast.

Amur honeysuckle is proving valuable as emergency winter food and cover for birds in the Midwest.

Cardinal autumn-olive, recently released to nurserymen in the Northeast and Midwest, attracts song birds in summer with its fruit and nesting cover.

Lana vetch in California and Oregon concentrates mourning doves in the hunting season.

In the South sawtooth oak and runner oak are in the final testing stages as dependable sources of acorns for turkeys and squirrels.

Seeds which resist decay when inundated make a plant useful for waterfowl food. Browntop millet, barnyard grass, and pale ladythumb (*Polygonum lapathifolium*) seeds stay firm when the shooting ground is flooded. Shooting clubs and preserves represent an alternate and profitable use for land.

Similarly, plants for recreation are as varied in characteristics as their purposes. Pensacola bahiagrass in the Southeast and Durar hard fescue in the North are turf grasses useful for roadsides, camp grounds, and trailer parks. Both require a minimum of mowing and maintenance, and both are shade

Durar hard fescue forms a tough turf that excludes weeds and produces few seed heads.

Lana vetch cascading down a flood-control dam and draping gracefully over the outlet structure provides permanent soil protection as well as a blaze of color when in flower.

Beachgrass traps the shifting sand and continues to grow through the accumulation. It is used to stabilize dunes.

tolerant. Durar hard fescue is especially valuable for holding and suppressing brush on ski slopes.

A recent publication by Washington State University, "Adaptation of Trees and Shrubs for the Intermountain Area of the Pacific Northwest," describes the cooperative testing of woody plants for wildlife, recreation, and conservation plantings. Some of the native plants found adapted and promising are golden currant, hawthorn snowberry, bitterbrush, and Rocky Mountain juniper.

Garrison creeping foxtail, a wetland plant, provides protection to pond margins and streambanks, yet is low-growing so that it does not interfere with fishing or swimming. A drawf reed canarygrass is under development for this same use.

Sometimes, it is desirable to prevent use or foot traffic on critical areas. Memorial rose, a trailing vine with an attractive flower, protects the soil surface and effectively discourages use.

Many plants developed for forage, erosion control, windbreak, or wildlife uses are also attractive in form, foliage, flower, or fruit. Crownvetch, whether used for roadbanks or forage, adds variety and beauty to the landscape; beachgrass plantings make the dunes photogenic; clumps of shrubs provide form and color throughout the season as well as a haven for wildlife.

Conservation plants provide variety to the landscape and beauty to the countryside. Alternating strips of green between the gold or cereal grain, grassed waterways tracing a pattern through the fields, lush pastures filled with grazing herds, and farm ponds surrounded by turf and shrubs are the landmarks of the conservation pattern. ♦

Pale ladythumb is being grown in plots at Gray Lodge, Calif., to test its value for waterfowl food (Photo courtesy California Department of Fish and Game).

Recreation Makes New Jobs

Operating fun farms gives young people new hope for future in the country

THE trend toward income-producing outdoor recreation on farms is having two beneficial side effects. These enterprises are keeping young people on the farm, and they are creating jobs for recreational and other skilled and semiskilled workers.

Success stories

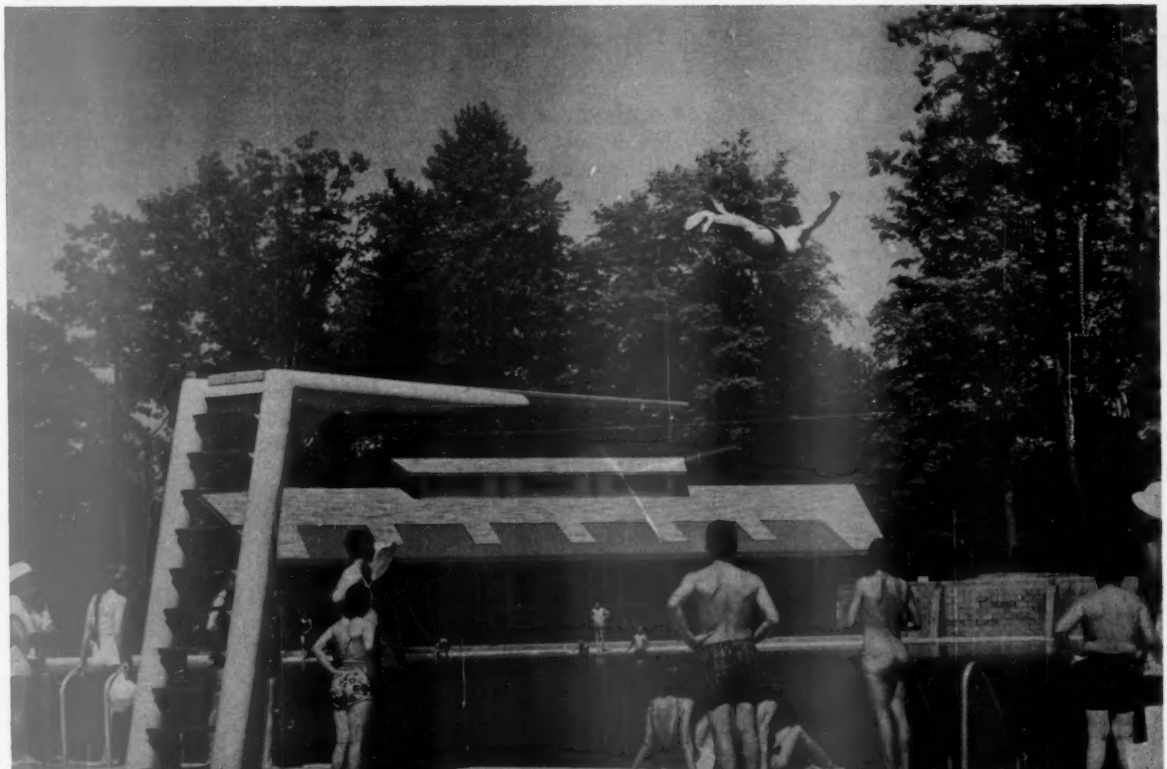
Since passage of the Food and Agriculture Act of 1962, the USDA has been able to expand its help to farm families who wish to establish rural recreational businesses. There are many success stories.

Take, for example, Mr. and Mrs. Frank S. Judd of near Litchfield, Conn., who converted part of their farm into a day camp for boys and girls 4 to 12 years old. In their first year of operation they employed a cook and six trained counselors, in addition to their three children, all college graduates with teaching experience.

They plan to increase the number of counselors as the enrollment grows, having 1 counselor for every 10 youngsters. The counselors need to be experienced in handling boys and girls 4 to 12 years old. Their job is to teach and supervise such activities as swimming, boating, water safety, playground sports, woodcraft, nature lore, the handling of farm and other domestic animals, and conservation of natural resources.

At Slingerlands, N.Y., William R. Wais turned part of his apple and pear orchard, including a 5-acre farm pond, into a day camp and swim club. He employs a program director, a nurse, and specialists for waterfront, physical education, and arts and crafts activities. A pavilion and snack bar provide employment for four persons. Mrs. Wais and their daughter, Linda, help manage the enterprise.

High dive into the 4½-acre lake on the William Wais family recreation farm is executed by Tall Timbers Day Camp guest Ben Olds.



Frank Miscoski converted 150 res of his 208-acre corn and heat farm at Cream Ridge, N.J., to an 18-hole golf course. In dition to help from Mrs. Mis- oski and their three children, he mploys as many as nine workers.

hildren help

Near Bangor, Maine, Calvin ohnson gave up dairy farming nd went into the business of oarding horses. With others he ormed the Ski Horse Mountain ssociation. The three Johnson hildren help run the activities. everal others, including a ski pro, terer, waitresses, and ski lift perators, are employed full or art-time.

William D. Bailey just couldn't ake a living from his 135-acre airy farm at Pughtown, W. Va. hen he built a golf course. The nterprise was so successful the rst year that William, Jr., and his ife, who had left the farm, moved ack. In addition to their help, e Baileys employ a neighbor ll-time in the summer, part-time e rest of the year.

Burton N. Packard, Jr., is the ird generation of his family to wn and operate a camp on Sebec ake, Maine. The Packard's four hildren, who range in age from 13 20 years, plan to carry on the mily tradition in their expanded perations.

ack to nature

"There's a trend back to nature day," Packard says. "But once ost people get to a quiet, natural tting they like to have something do. When Granddad Packard ought this place in 1893, the nly outdoor recreation was fish- g. Today we also have boating, ater skiing, skin diving, swim- ing, hunting, hiking, camping, rd watching, picnicking, and ature study. To meet today's eeds we have to have tent and railer space as well as cabins and ttages."

All these new interests add up

Janice Miscoski, above, engages in sales talk at her parents' golf course clubhouse. Three generations help run the Packard family camp on Sebec Lake, Maine. Left to right below are Burton N. Packard, Jr., present owner and operator of the camp; his sons Burton N., Rickey, and Jerry, and Burton N. Packard, Sr.

to fresh opportunities for employment. As farmers move into the recreation business, there's a new need not only for the kind of trained and experienced employees usually associated with playgrounds and parks, but also for cooks, waitresses, shop managers, woodsmen, and persons who know how to operate ski lifts and other machinery. Packard, for example, has for the benefit of his guests a staff of guides experienced as woodsmen, fishermen, and outdoor cooks.

Conservation a help

Usually the conservation work already done by the farmer is useful in his recreation enterprise. Farm ponds are often the center of activity. Drainage systems make the land useful for recreation. Diversions protect play areas by channeling runoff water to safe outlets. Woodland management encourages wildlife, always a source of interest to the recreationist. Irrigation keeps golf courses green and attractive.

In developing recreation enterprises, farmers have the help of the Soil Conservation Service and other Department of Agriculture agencies, including the Farmers Home Administration, the Agricultural Stabilization and Conservation Service, and the Federal Extension Service.

SCS gives technical assistance through local soil and water conservation districts. FHA provides loans to low income farmers and to rural nonprofit associations. ASCS is authorized to cost-share in the conversion of cropland to recreation in a limited number of counties as a pilot program. The Extension Service provides training and consultation to managers and employees of outdoor recreation enterprises.

Conservationists point out that farmland converted to outdoor recreation can usually be reconverted to crop production should the need arise. Meantime American farmers are meeting a pressing need by turning part of their land over to recreational use. In doing so, they are creating new job opportunities for professional, skilled, and semiskilled workers. They are also providing opportunities for their children to remain as productive members of the rural community. ♦

Camporee Joins Scouts, 4-H'ers

BOY Scouts and 4-H Clubs in Bennington, Vt., have joined forces in Conservation Camporees. The highly successful innovation has resulted in more professional talent, a lively exchange of ideas, and a bigger bale of fun for everyone.

How did the conservation camporee idea get started?

First important factor was the site provided by the Vermont Forest and Farmland Foundation. The 2,500-acre mountain location near Rupert, Vt., offered a camping spread beyond compare.

The second factor grew out of the thought of integrating 4-H boys into Scout patrols. The boys with their leaders bring their own food and cook it themselves. The 4-H boys join Scout patrols and learn to do the things Scouts are trained to do.

Camporee directors are Bennington County 4-H Club Agent James "Bud" Edgerton; Boy Scout Executive Raymond C. Lovely, Taconic District, Green Mountain Council; Louis Dondero, soil scientist, and James L. Wooward, soil conservation technician, SCS.

The main topic the first year, 1963, was "soil and water conservation."

A plan was worked out by which more than 200 boys rotated between 20 instructors, 10 different topics, and in 4 hours all had covered the whole course.

Vermont State Fish and Game experts gave a demonstration of fish management and stream control.

A forestry specialist from the State Department of Forests and Parks and private forest management groups gave classes on experimental plots to explain good forest management, tree planting, tree pruning, and the like.

Soil Consevation Service personnel gave instruction in general soil conservation, soil science, and the development of springs and seeps for water.

A fire warden supervisor gave an impressive demonstration on fire prevention and control.

The Bennington County Soil and Water Conservation District bulldozer was at work building a small wildlife pond about 300 feet from the camping area.

It was on this site that a class was held for the entire group of 205 boys and their leaders right after the noon meal. The talk was on ponds and pond construction.

The afternoon program was similar. Topics were of scouting skills to give the 4-H boys an idea of what scouting is like.

A second Conservation Camporee was held in September 1964. The topic was forestry. The afternoon program included demonstrations on survival, wildlife, soil and water conservation, and cooking without utensils.

Planning is well under way for the third Conservation Camporee. The theme will be "wildlife conservation." Subjects for instruction will include river pollution, fish management, deer herd and other game control, wildlife area development, gun and hunting safety, and others.

Everyone involved in the Camporee, from the staff to the newest Scout or 4-H boy, feels a great deal of pride as a result of his part in the conservation education of youth. — JAMES L. WOODARD, *Soil Conservation Technician, SCS, Bennington, Vt.* ♦

Plants for Rights-Of-Way

Utility firms plant rather than bulldoze, get lower upkeep costs and better results

By E. R. Smith
Biologist, SCS, Raleigh, N.C.

PLANTING utility rights-of-way to dense, low-growing vegetation is showing promise as a cure for maintenance problems in North Carolina.

Fescue, sericea, and shrub lespedeza are proving effective in four ways: They prevent erosion, keep out invading vegetation by shading and root competition, furnish food and cover for wildlife, and do not grow high enough to interfere with transmission lines.

Maintenance of utility rights-of-way through woodland areas is an expensive and recurring operation. These areas must be well kept so that trees will not grow into the powerlines and so that inspections and repairs can be made quickly and easily.

Various methods have been employed to control unwanted vegetation—hand cutting, disking and mowing, chemical sprays, and bulldozing. Such treatments are expensive and give varying lengths of maintenance-free periods.

Bulldozing given up

Recent studies by one North Carolina utility corporation indicated that bulldozing was the most economical method of maintenance. Since the study, however, this company has discontinued bulldozing and is now mowing rights-of-way with a rotary mower (brush-hog). The effects of bulldozing on the land were anything but desirable.

Bulldozing removed much of the topsoil from the rights-of-way and pushed it to the sides. The denuded area eroded rapidly. After a year or so, some areas were eroded down to the subsoil, and sometimes the parent material or even the bedrock was exposed.

The soil washed from the slopes and ridgetops was carried downhill and deposited in the intervening bottoms. Watercourses passing through such rights-of-way picked up heavy silt loads that resulted in filling stream channels and riverbeds.

Many of the deposits on bottom land were 24 to 48 inches deep, indicating the large amount of soil removed from the slopes.

On such eroded land, the problem of unwanted vegetation is solved for a while, for natural revegetation under these conditions is very slow. It often takes 4 to 5 years for new cover to arrest erosion. Some areas continue to erode indefinitely because they are so sterile that vegetation can not survive.

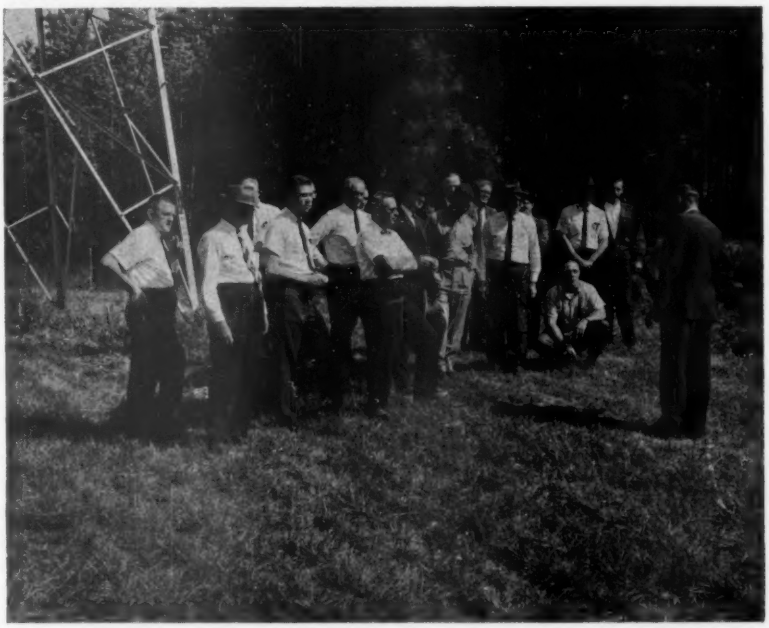
The vegetation that volunteers after bulldozing is a mixture of herbs, grasses, tree seedlings and sprouts, shrubs and vines. Many of these plants produce food and cover for wildlife — doves, deer, quail, rabbits, songbirds, and turkeys. They improve in value until about the eighth year, then they start to decline.

If natural vegetation could be left in this condition, everything would be fine, but between the sixth and eighth year the right-of-way has to be recleared, and the area starts its slow process of revegetation again.

Trees invade

Another fault of bulldozing is that it defeats its purpose by creating a favorable seedbed for new trees. Pine, yellow poplar, and

Conservation district, county, and utility company officials inspect a wildlife food planting along an electric power transmission line near Apex, N.C.



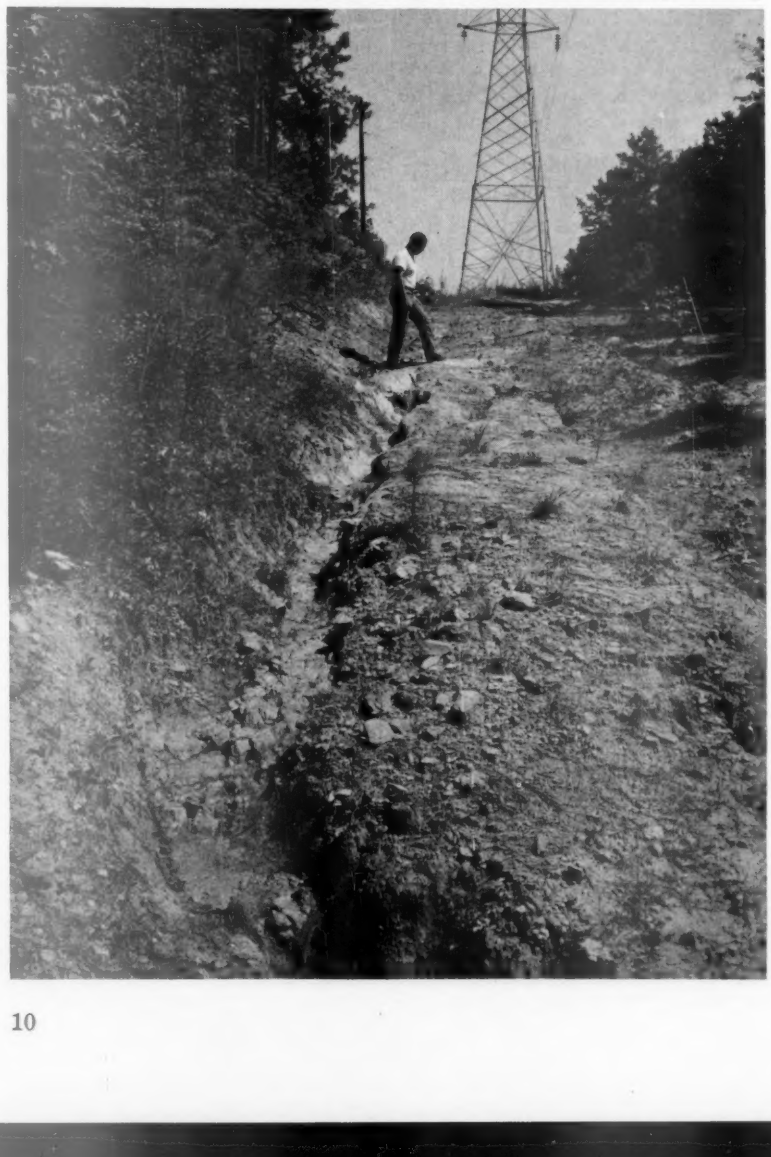
sweetgum — three of the fastest growing trees in the Southeast—all require mineral soil for seed germination. Bulldozing provides such a seedbed. Even if there are no seed trees nearby, the light, winged seeds are carried long distances by the wind.

The search for a more satisfactory maintenance method led to cooperative experiments with plantings of special vegetation in 16 North Carolina counties. Soil and water conservation districts, local utility companies, the State Wildlife Resources Commission, and the Soil Conservation Service have joined hands in this venture.

Division of duties varies, but usually the utility company clears the rights-of-way and prepares the seedbed. The districts or other local groups furnish the fertilizer and some of the seed and do the planting. The Wildlife Resources Commission furnishes the rest of the seed. The SCS furnishes technical assistance.

The pattern generally followed is to plant the center of the right-of-way to fescue, with sericea or shrub lespedeza on the sides. This leaves the center open to travel for maintenance and inspection, while the shade-tolerant lespedezas mak a dense growth along the edges o the woodland.

Erosion slices a denuded slope after a powerline right-of-way has been cleared by bulldozing.



Cooperative plantings

Such a cooperative planting wa carried out in Wake County las year. The Carolina Power an Light Company, Neuse River So and Water Conservation District and Wildlife Resources Commis sion planted a mile of powerlin transmission right-of-way nea Apex.

Roy Womble, chairman of th Wake County district supervisors did the planting. An ardent quai hunter, Mr. Womble planted th edges to a special mixture of wild life food and cover plants fur nished by the Wildlife Resource Commission. The mixture contains shrub lespedeza as a base. The oth er plants—wild reseeding soybean partridgepea, common lespedeza and browntop millet—furnish food while the shrub lespedeza is ma turing. These fade out as the shrub lespedeza matures and takes over the site. The middle of the right-of-way was planted to tall fescue.

All three of the participating groups have been well pleased with the results. Carolina Power and Light Company and the Wildlife Resources Commission have of fered assistance in planting sim ilar rights-of-way throughout the State. The Neuse River district supervisors invited leaders from other counties to visit the Apex planting. They were impressed with what they saw and returned to their counties with the intent of establishing similar projects.

As this type of maintenance be comes widespread, it not only will control erosion and benefit wild life, but also will help to make North Carolina a more beautiful State in which to live and travel. ♦

Most of the land now used for cropland can be safely cultivated if protected by adequate conservation practices. ♦

Conservation Districts Sponsor Neighborhood Youth Corps Project

A PROGRAM to enroll up to 300 young Nebraskans in soil and water conservation jobs is now under way as a Neighborhood Youth Corps project, under terms of Title 1-b of the Economic Opportunity Act.

It will give eligible young people a chance to: (1) Earn their own money, (2) complete their formal education, (3) gain valuable work experience, and (4) play an important part in building a better community through resource conservation and development.

Joint sponsorship

Nebraska's Soil and Water Conservation Commission is sponsoring the project with cooperation from the State's 86 local soil and water conservation districts, the Soil Conservation Service, the University of Nebraska Extension Division, the State Employment Service, other agencies, and schools.

The initial contract period is 6 months. However, the sponsor hopes the contract can be extended so that enrollees can be given up to 2 years of employment in all phases of resource conservation. The cost for the current 6 months is about $350,000, of which $287,700 is assumed by the Federal Government.

According to Warren D. Fairchild, executive secretary of the Soil and Water Conservation Commission, final selection of the young men and women is up to the supervisors of soil and water conservation districts. School officials and the local employment service screen the applicants. Criteria for acceptance include proof that the youths have come from "economically disadvantageous backgrounds." They must need money either to continue their education or for training to prepare themselves for future employment.

"We're especially interested that their employment with the Youth Corps will be a stepping stone to something better," said Fairchild, "and efforts will be made through employment agencies to get them regular jobs after 'graduation' or to help them enough for further education."

Applicants are chosen without regard to color, race, or creed and come primarily from counties in which they are employed.

Enrollees are working at a variety of jobs, all of which further the aims of the local district's going program. Fairchild says there is no danger of replacing previously employed individuals, however, for "no district has yet had the funds to employ all the help that is needed."

Some of the jobs being carried out with Youth Corps help are tree planting, helping with conservation engineering surveys, staking terraces and dams, typing, maintaining files, inking conservation maps, preparing conservation displays, helping with field days and demonstration, seeding grasses, and managing and maintaining district equipment.

Opportunity for rural youth

Enrollees in the Nebraska program are mainly from farms, ranches, and small towns, and average 18 years of age. About one-seventh are young women. All enrollees are paid $1.25 an hour.

In local conservation districts, primary responsibility for on-the-job counseling and supervision is through Soil Conservation Service personnel and district supervisors. Counseling is also provided by the Nebraska Soil and Water Conservation Commission. ♦

4-H Conservation Workshop Held

COOPERATION is the key word in Colorado's 1 week 4-H conservation workshop conducted annually during July by conservation agencies and organizations.

The workshop is held at a campsite on the Manitou experimental area of the Rocky Mountains Forest and Range Experiment Station near Colorado Springs.

The Soil Conservation Service gives direct leadership and technical assistance to the soil and water and range management sections of the workshop. Colorade State Forest Service; U. S. Forest Service; Colorado Department of Game, Fish and Parks; and Colorado State University Extension Service also play an important role in the program.

Instructors accompany the boys to the field each morning and give on-the-ground instruction. At the day's end boys give demonstrations and exchange information.

Ralph Kotich, Colorado State University extension conservationist, is training program director and coordinates the work program with the various related agencies and organizations.

Fred Mark, State conservationist, SCS, participates in the program along with the SCS personnel who work in the field with the boys.

Outstanding speakers in conservation are brought in, and leading farmers and ranchers attend to pass along their ideas on practical conservation. There is planned recreation to balance the program.

Most of the boys gain workshop sponsorship through their local soil conservation districts. The response to the program has been excellent.—RALPH KOTICH, *Extension Conservationist, Cooperative Extension Service, Fort Collins, Colo.* ♦

Speed-up in soil mapping . . .

Use of Stereoscope in the Field Improves Accuracy of Surveys

By Joel Cawthorn
Soil Scientist, SCS, Raleigh, N. C.

EXPERIENCED soil scientists agree that a stereoscope is needed during the soil mapping process. Some say that production can be increased as much as 10 percent and accuracy as much as 25 percent. Others say that it is difficult to handle two or more aerial photographs and a stereoscope in the field.

North Carolina soil scientists have found an answer to the problem. They list the advantages of field use of stereoscopes:

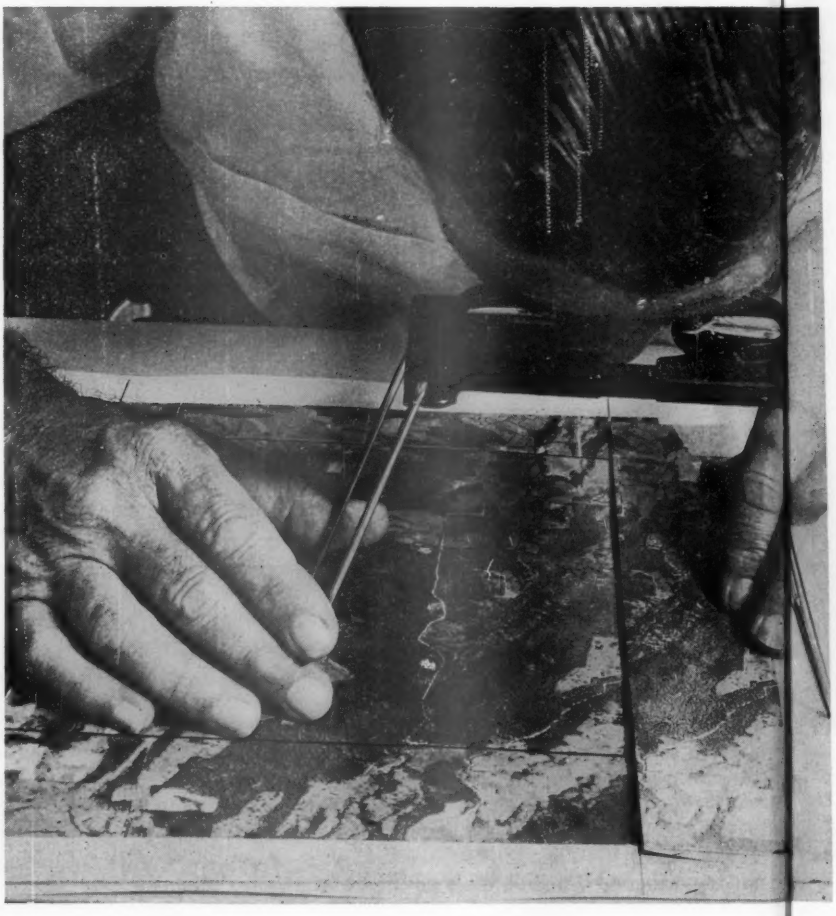
(1) After the soil scientist has marked on his map several places where there is a significant slope break, a stereoscope will enable him to complete the delineation with a high degree of accuracy.

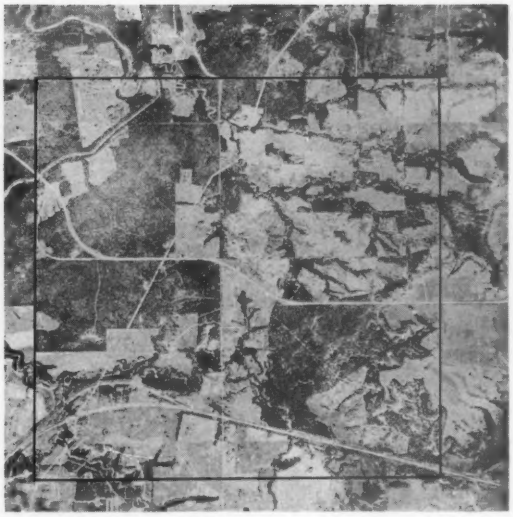
(2) He can delineate landforms, such as bottom lands and stream terraces. If the boundaries can't be located in the office, a stereoscope can help the mapper trace them accurately after he finds them in the field. He can determine if local alluvial and colluvial areas are large enough to be shown on the map and can sketch their boundaries.

(3) Field use of a stereoscope helps the soil scientist to maintain an aerial view in depth of the area where he is working. It helps him to find a route to travel. He can study the lay of the land, locate gullies or other obstacles hidden from ground observation, and find trails, roads, and streams.

For many years soil scientists throughout the Soil Conservation Service have used aerial photographs with and without taking advantages of the third dimension and the greater photo detail available to those using a stereoscope. In North Carolina soil scientists are using the stereoscope to a greater degree than ever before because they have found an easier way to use that principle. They credit this increased use of stereoscopes in the field to E. F. Goldston, a soil scientist with the North Carolina Experiment Station. In 1955, Goldston introduced a method of trimming, folding, and mounting alternate photographs on the mapping photograph to form an easy-to-use stereogram.

The pictures show how it is done.





Steps in Preparing Photographs

(1) *Mark match lines on the photographs to be mapped in the usual manner. The center photograph (top) is the mapping photograph.*

(2) *Select adjacent* alternate *photographs (top l. and r.)*

(3) *Sketch on each* alternate *photograph exactly* half *of the area of the mapping photograph.*

(4) *Trim the alternate photographs on upper and lower lines with sharp instrument. Sides may be trimmed, but leave at least 1 inch outside of the marked area.* Mapping photograph *is not to be cut or trimmed.*

(5) *Draw dashed pencil line across center of each portion of* alternate *photographs.*

(6) *Cut through* emulsion only *along the dashed line with a sharp instrument.*

(7) *Fold so that mapping area of print shows and place in position for stereoscopic viewing (bottom r.)*

(8) *Fasten with tape outside the viewing area on alternate parts and beneath mapping photograph (bottom l.).*

(9) *Fold under for viewing near edge of mapping photograph and out for viewing center portions.*

(10) *Mark identification on remaining parts of alternate photographs and save for use with other maps.*

Grass and Livestock Keep Conservationist Busy

COASTAL bermudagrass is taking the 81-acre farm of Herman and Iona Crawford in the Harrison County Soil Conservation District, Tex.—just as fast as Crawford can spread it.

But he has a problem. His neighbors keep him busy planting the grass on their farms. Even with a new bermudagrass sprigging machine he has barely been able to keep up with the demand and to plant 40 acres for himself.

That part of his story started when he planted a field in 1962. The results were excellent, and in 1964 he harvested roots from this field and custom-planted 89 acres on other farms.

But Crawford's story really began in 1938 when he signed a lease-purchase plan with the Farmers Home Administration. He bought the farm in 1942.

Cotton and truck crops—the latter he sold from a stand built in his front yard—helped him to raise a family of seven children. He also worked at a chemical plant near his home. The whole family worked together, and in 1954 replaced the old house with a modern frame home.

But it didn't all come about just because he worked hard, Crawford will tell you. Eighty-one depleted acres just won't produce enough for a family of 9 without a lot of help. He got that help in 1946 when he became the 319th cooperator with the Harrison County District. With the help of the Soil Conservation Service he carefully worked out a conservation plan and followed it just as carefully. Vetch, in rotation with cash crops, worked wonders.

By 1960, he began to see that grassland and livestock would fit into his farming operations. In 1961, SCS helped him revise his district plan to change the course of his operations.

SCS Work Unit Conservationist Louis N. Neumeyer (l.) and Herman Crawford review the conservation plan that guided conversion of most of Crawford's cropland to grass. Crawford (below) raises livestock to match the quality of his coastal bermudagrass and crimson clover pastures.

He got another FHA loan to buy some cattle, including an outstanding Hereford bull. As the herd grew, his cropland acreage diminished. Now, his conversion from rowcrop farming to livestock—and coastal bermudagrass—is all but complete. —LOUIS N. NEUMEYER, *Work Unit Conservationist, SCS, Marshall, Tex.* ♦

District Directors Set Example By Plow Planting on Own Farms

By Edward B. Trovillion
Work Unit Conservationist, SCS, Metropolis, Ill.

MASSAC County Soil Conservation District Directors Robert Travis and Wayne Hunerkoch are practical salesmen. They sell plow-planting by using it on their own farms.

And through the Illinois district's information program, they have influenced other farmers to begin using plow-planting and other minimum tillage practices.

With a degree in agronomy from the University of Illinois, Wayne Hunerkoch joined his father in his 26-year-old seed corn business in 1958. Together they have put into use the latest methods in farming.

"We have been using plow-planting for 4 years," Mr. Hunerkoch says, "but it didn't receive much notice until it was given publicity in our newspaper."

District Board Chairman Bob Travis operates an 880-acre livestock and crop farm with his father and two brothers.

"We tried plow-planting on 30 acres the first year," he said. "It proved so good that we went 100 percent to wheel-track planting on 265 acres in 1963."

This year it was standard practice. Corn growers from miles around have come to look at their "rough corn planting" after they read about it in the paper. And when they went home, it was to try some of it themselves—or plan to do so next year.

Other directors of the conserva-

The Hunerkoch Seed Company farm is a practical demonstration of conservation farming. Besides the scenic contour strips of corn with alternate sweetclover plots, space is used for a recreation lake, a farm pond, and protected wildlife areas.

tion district are strong advocates of minimum tillage too, but don't have as much cornland. Earl Marlman had a zero-tillage demonstration last year. Phil Arensman used plow-planting this year and had a public demonstration of a new once-over implement which does the whole job of plowing and planting in one operation.

Wayne Hunerkoch, on his upland soils, has to use contour strips and alternates with sweetclover to prevent excessive erosion. The result on the Hunerkoch and Travis farms has been a great improvement in soil tilth and capacity for absorbing water.

Massac County farmers by the dozens are swinging to minimum tillage methods. The district directors who have been willing to have the public watch them succeed or fail deserve the credit.

The real test of a salesman is, "Does he use the product himself?" These men do, as a matter of choice. ♦

Massac County District Board Chairman Bob Travis plants corn in the rough 1 day after dense pasture sod was plowed down. A cross section of the soil in the Travis cornfield (below) shows the well-compacted root zone beneath the row after wheel-track planting.

Wayne Hunerkoch holds sample of granular Hosmer silt loam from his cornfield. He says plow planting has improved the condition of the soil from year to year.

Grass, Pipelines Restore Range

RANCHER George Wilson now grazes more than 100 head of whitefaced cattle on highly productive rangeland in the rugged mountain country of central Washington.

Native and introduced grasses and 17,000 feet of pipelines solved the problems of poor range and water shortage which had forced Wilson to dispose of his cattle herd in 1956.

The return to profitable ranching began in 1957 when Wilson became a cooperator in the South Central Okanogan Soil and Water Conservation District. In 1958, with the help of the Soil Conservation Service and the district, Wilson and his son, Mac, brought conservation planning to the steep sagebrush covered slopes high above the Columbia River.

SCS conservationists completed soil and other resource surveys and

helped develop a comprehensive conservation plan. The plan provided for grass seedings for spring grazing and summer and late summer forage, and installation of pipelines for livestock water. The 3,120-acre ranch is located in an 8- to 10-inch rainfall area.

For planting on old grain fields, the conservationists selected crested wheatgrass, an excellent early grass adapted to droughty, shallow soils. They chose intermediate wheatgrass for better sites.

Wilson used a homemade roller to firmly pack the fine sandy loam soils after seeding. He made the roller with a piece of 14-inch well casing plugged at the ends; on this he mounted 29 old car tires. He attached the casing to a metal frame and filled it with water to obtain the necessary weight.

The pastures were left undisturbed in the early stages of grass establishment, and the vigor of the native range was renewed.

By 1963, Wilson had about 400 acres of crested wheatgrass, intermediate wheatgrass, and native range divided into six areas. Most remaining former fields were seeded to adapted grass varieties this year. —ALBERT E. BLOMDAHL, *Work Unit Conservationist, SCS, Okanogan, Wash.* ♦

Great Plains Council Holds Annual Meeting

The program of the annual meeting of the Great Plains Agricultural Council, held in Laramie, Wyo., July 28 and 29, 1965, encompassed topics relating to the effective use of water, river basin activities, and the family farm.

This council has pioneered in developing, promoting, adapting, and using programs to get better land use and conservation in the Plains. Dr. Glenn C. Holm, State Experiment Station, Stillwater, Okla., is chairman of the council. ♦

Conservation campers see weed-control experiment in field of corn grown on the contour. (Photo courtesy Massachusetts Division of Fisheries and Game.)

Conservation Camp Gives Boys New Viewpoint on Wildlife

By Chester T. Kulisa
Conservation Technician, SCS, Oxford, Mass.

EACH year the 150 boys attending the Massachusetts Junior Conservation Camp gain a new point of view on wildlife.

As one youngster put it, "I now have a better understanding of how good conservation farming goes hand in hand with more and better wildlife."

Another said, "I have an entirely different attitude toward wildlife, now that I've actually seen many of the animals out on the land and learned about their usefulness."

All areas of the State of Massachusetts are represented at the 4-H Camp Center in Spencer. The boys, 14 to 17 years old, are delighted to see deer, raccoon, owls, possum, and muskrats as part of their studies conducted by State and Federal professional conservationists. The conservation camp is directed by the Massachusetts Division of Fisheries and Game, Massachusetts Department of Natural Resources, and Massachusetts Conservation, Inc.

Part of each 2 weeks' camp schedule in 1964 included classroom and outdoor laboratories on soil and water conservation practices and a field trip to observe conservation practices being established on local farms within the Upper Quaboag River watershed.

Typical of field trips was the one to the dairy farm of Dwight Proctor, Spencer. Mr. Proctor was the recipient of the 1953 Conservation Trophy Award, sponsored by the Southern Worcester Conservation District of which he is a cooperator. On his farm the boys observed corn being grown across the slope of the hillsides, weed control, land clearing, and stonewalls being buried to make larger fields for more efficient use of land.

As the boys walked over the 250-acre farm, they saw cover crops of rye, oats, and excellent hay-pasture mixtures for 100 head of Ayrshire cattle.

Some of the permanent type conservation practices observed on the farm were grassed waterways, four livestock and wildlife ponds,

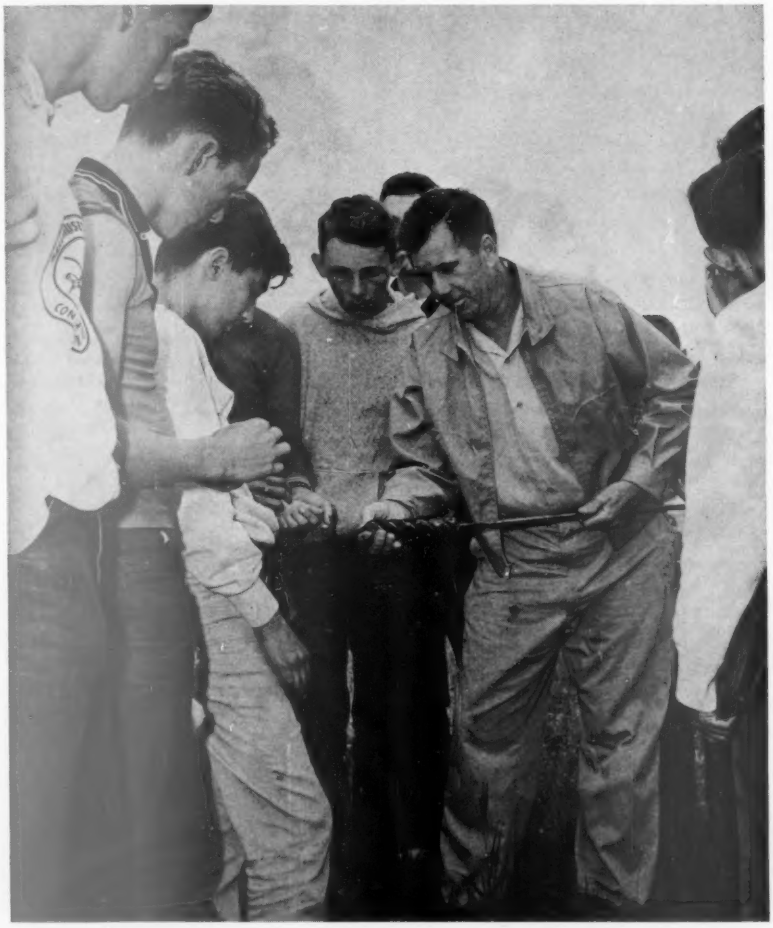
open field drains, and an area recently drained with tile. On this 3-hour tour they observed to their delight, eight ducks, two woodchucks, two weasels, rabbits, squirrels, chipmunks, hawks, and fish in the ponds. They learned that as conservation district cooperators, farmers receive technical help from the Soil Conservation Service.

Following the tour of the modern dairy barn, built of native lumber harvested from the farm, the boys saw the use of modern haymaking machinery. Mr. Proctor spoke to the boys on better farmer-hunter relationships. He told how his 49 years of conservation farming had increased the wildlife on his farm.

Each year, the Massachusetts Sportsmen's Clubs sponsor most of the campers, but gardens clubs, churches, town conservation commissions, newspapers, and radio stations are also helping to finance deserving boys.

At final sessions of the camping program, all participants are tested to see how much they have learned. Results show that these campers have improved their knowledge of fish, wildlife, law enforcement, and have gained a deeper appreciation of their heritage in soil and water. ♦

As an instructor in the camp, Soil Conservation Technician Chester T. Kulisa shows the boys how topsoil differs from subsoil. (Photo courtesy Massachusetts Division of Fisheries and Game.)



City Gets Award As SCD Cooperator

EFFECTIVE conservation on city-owned land has brought recognition to the City of Newton, Kans. It recently was presented a conservation award by the Kansas Bankers Association.

The city has cooperated with the Harvey County Soil Conservation District since buying a 240-acre tract in 1955 for well sites to supply city water. Half of the land was sandy, erosion-prone cropland. The rest was overgrazed rangeland.

Under a conservation plan developed with the help of the Soil Conservation Service, the cropland was seeded to a native-grass mixture and the rangeland was improved through proper range use. The land now supports a vigorous growth of native grasses and is leased for controlled grazing. —ELBERT J. GREEN, *Work Unit Conservationist, SCS, Newton, Kans.* ♦

Conservation Society Has 20th Anniversary

"Conservation is Everyone's Responsibility" is the theme for the 20th anniversary meeting of professional conservationists from throughout North America at the 4-day conference of the Soil Conservation Society of America in Philadelphia, Pa., August 22-25.

Society President Minott Silliman, Jr., Madison, Wis., said that the theme was chosen to show that all citizens—rural and urban, landowner and land user, city worker, and farmer—have an important stake in the management of renewable natural resources.

The sessions also were designed to help individuals engaged full-time in natural resources work keep abreast of new scientific, technological, theoretical, and practical developments in resource conservation, said Selden Lee Tinsley, New Brunswick, N. J., Chairman of the Program Committee. ♦

Agriculture and the Landscape

By Marion S. Monk, Jr.
President, National Association of Soil and Water Conservation Districts, Batchelor, La.

THE restoration, the enhancement, and the maintenance of natural beauty as an integral element or characteristic of the rural landscape are desirable goals capable of accomplishment. In this presentation the farmstead will be regarded as part of the landscape.

There are a number of prevailing reasons why significantly large tracts of the rural landscape are either deteriorating in appearance or are failing to make a reasonable contribution to a countryside that ought to be notable for its natural beauty. It is useful to identify some of the chief causes of ugliness, monotony, and drabness as a prerequisite to recommending solutions.

Poverty vs. beauty

Beauty rarely exists in the midst of poverty. For the millions of rural people trying to get along with a marginal income or less, matters of beauty do not get a high priority. First claims on the funds and attention of low income families are the size of the next crop, payment of taxes, payments on the interest and principal of loans, clothing and education for the children, bread to eat, and a roof overhead. Low farm income is probably the number one enemy of natural beauty in rural America.

Investments in beauty are investments in the future. There is little incentive for farm families to invest in the appearance of farmsteads or farms when foreclosure or sale is just around the corner. Thousands of farm families are leaving the farm each year and this instability operates against attention to beauty in the countryside.

Even where there is stability and a reasonable income, attention to the appearance of the farmstead and the landscape has suffered from apathy or misguided notions that investments in appearance are either superficial, vain, or improvident. In too many communities, a pleasing environment has not been given the status of an acceptable community or individual objective. In these circumstances, there is neither organization nor attitude to identify aspects of beauty and foster them.

Untended land

There is an increasing area of abandoned and little-used land in rural America as agricultural production efficiency operates to constrict the acreage devoted to crops and livestock, and as small farms are sold or retired from production. Increasing thousands of acres are growing up in weeds, brush, untended grass, and scrub trees. More often than not, these lands become an eyesore.

In addition to untended idle land, there is eroded land—land torn with gullies by excessive or misguided use, stripped of its productive topsoil, and laid bare by wind and water. Whether as forlorn remnants of former mistakes, or the angry evidence of damage now progressively under way, these marks of waste are, to say the very least, unsatisfying.

Neither beauty nor attention to it are automatic. Heretofore there has been little realistic incentive to bring action in this direction. As a government or community purpose, it has not often ranked high as a claimant for time, money, informational help, or technical assistance.

If these are, indeed, some of the key reasons for cancer spots of ugliness, drabness, and inattention to beauty in the rural landscape, then some of the avenues to improvement become evident.

We need . . .

We need to continue our exploration in the United States for ways to improve the income of disadvantaged rural landowners and operators.

We need to continue our concern for farm family stability.

We need a program purposefully focused on the use of land within its basic capabilities and the treatment of land according to its needs for protection and use. Eligible use, in this program, should not be confined to commodity production.

We need a program of technical assistance, cost-sharing, and perhaps loans to help convert abandoned, idle, or little-used farmland from the ugliness of weed and brush infestation to some constructive uses—whether these be for wildlife, nature trails, water development, or purely esthetic enjoyment.

We need to step up conservation and resource development work on the operating farms and ranches of the country—not only

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This statement was presented to the panel on Agriculture and the Landscape at the White House Conference on Natural Beauty, May 24.

to heal the scars of past carelessness and exploitation, such as gullies, muddy streams, and eroded fields; but to create the fact as well as the appearance of orderly cooperation by men with Nature.

We need to establish the restoration and enhancement of natural beauty as an acceptable, important goal of the people of the country.

Government agency personnel working in the countryside must be authorized and directed to assist, through their regular program functions, toward attainment of the goal.

Local action

Progress will require the continuing support and participation of a variety of local organizations. Important among these are the 3,000 soil and water conservation districts organized under State laws in the 50 States, Puerto Rico, and the Virgin Islands. They are operated by local people and concern themselves with the conservation, development, and management of land, water, and related natural resources. These local subdivisions of State government cover more than 95 percent of all the privately owned lands of the Nation. It is through them that the Department of Agriculture provides technical and other assistance to more than 2 million land owners and operators and to thousands of communities.

Consideration should be given to a program designed to improve the appearance of farmlands and farmsteads—as well as the rights-of-way—adjoining the Nation's main-traveled highways. Cost-sharing and technical assistance would be important ingredients to progress on these properties.

Consideration should also be given to the development of potentially pleasing vistas of unique or particularly pleasing natural beauty, extending well beyond the highway rights-of-way and the immediately adjoining farmland. Attention to these vistas, especially rolling lands that have gone out of production or are scheduled for retirement from cultivation, could be most rewarding.

Most important, probably, is recognition that land and water are basic elements in the restoration and enhancement of natural beauty in the countryside. They are the source of the wealth that makes improvement of the farmstead possible. And they are, in themselves, the very substance of the rural landscape demanding attention. ♦

Recommendations of the Panel On Agriculture and the Landscape

THE panel on Agriculture and the Landscape of the White House Conference on Natural Beauty, May 24, submitted 10 specific recommendations to the President.

Chairman of the panel was Dr. Edward H. Graham, Vienna, Va., chairman of the Commission on Ecology of the International Union for the Conservation of Nature and Natural Resources and formerly assistant to the administrator, SCS.

Other members were D. A. Williams, administrator, SCS; Marion S. Monk, Jr., president of NACD, Batchelor, La.; Karl J. Belser, director of planning, Santa Clara County, Calif.; F. Fraser Darling, director of research, Conservation Foundation, New York; Andrew J. W. Scheffey, University of Massachusetts, Amherst, Mass.; Paul B. Sears, Yale University, New Haven, Conn.; Robert G. Wenkam, Hawaii State land-use commissioner, Honolulu.

The panel, acknowledging that three-fouths of America's nonurban land is in private hands, emphasized the need to use existing organizations and institutions rather than to devise new ones in maintaining and developing a beautiful countryside.

Against this background the panel recommended that:

"(1) Use of land capability classification and other resource inventories be made a condition for local and area planning, land use determinations, and zoning.

"(2) The President call on the Governors of the 50 States to exercise leadership in total land use planning as a means toward the orderly development and enhancement of the landscape within the States.

"(3) Guidelines be formulated to assist States in developing appropriate legislation for zoning, tax structures, ordinances, easements, development rights, etc., that would protect open space and prime agricultural land; and that the President consider proposing to the Governors the enactment of such State legislation.

"(4) Consideration be given by the Federal and State governments to a system of grants or tax concessions which would help offset revenue loss by local governments on land retained in agricultural or open space use.

"(5) In all land retirement and cropland adjustment programs, preservation and enhancement of natural beauty be considered an associated purpose in the technical assistance and cost-sharing provided through long-term agreements or contracts.

"(6) Preservation and enhancement of natural beauty be made an associated purpose of Federal programs of resource development and management, including technical assistance, cost-sharing, grants and loans involving nonprofit organizations, private landowners, communities, and local subdivisions of government.

"(7) Public resource programs be strengthened and local leadership be encouraged to initiate and

make more effective rural-urban planning and action through such mechanisms as soil and water conservation districts, small watershed projects, Resource Conservation and Development projects, planning boards, and other local organizations.

"(8) Professional training, research, and educational services in our college and university system to be expanded to deal with problems of the landscape and as a part of the total human environment; and that the President consider requesting these institutions to inaugurate appropriate programs within the several States.

"(9) Public land-administering agencies include natural beauty as a purpose associated with the management and treatment of all public land and water resources, with special attention to problems involving intermingled or contiguous private land.

"(10) Consideration be given to nationwide recognition of outstanding farm landscapes, comparable to that accorded historic and natural history sites." ♦

Youth for Beauty Program Announced

"WHEN I look for new ideas, new approaches, I look for people who are young—or to people who think young."

These remarks of Secretary of Agriculture Orville L. Freeman were part of his speech to launch a nationwide "Youth for Natural Beauty" campaign.

He named Luci Baines Johnson, the President's daughter, honorary chairman of the program at a ceremony opening an exhibit on natural beauty in the patio of the Department of Agriculture building. The exhibit included the Soil Conservation Service's "America the Beautiful" series of color photographs.

After naming Luci Baines Johnson honorary chairman of a "Youth for Natural Beauty" program at a ceremony in the patio of the Department of Agriculture Building, Secretary Freeman conducted the President's daughter on an inspection of the Soil Conservation Service's America the Beautiful exhibit of color photographs.

The Secretary challenged America's young people to become a driving force in the war on blight, to regain and retain the beauty that is America before it slips through our fingers and is irrevocably lost.

Many of the country's 2¼ million 4-H club members in USDA's own youth program will take a leadership responsibility in the campaign. Other leading young people's organizations will initiate their own beautification programs. Among them are Camp Fire Girls, Inc., Girl Scouts of the U.S.A., Boy Scouts of America, the Future Farmers and Future Homemakers of America, Junior Achievers, "JETS," and others.

In order to give impetus to the program, the Sears-Roebuck Foundation will sponsor a program of awards to be made through the National 4-H Committee for community beautification activities.

The Readers Digest Foundation is making available also a Citizenship-in-Action grant through the National 4-H Club Foundation. The money will be used by local 4-H clubs for various community service projects, including beautification.

The Boy Scouts of America have been helping to preserve and promote natural beauty since the scouting movement started. There are many recognitions in scouting for beautification and conservation. The Soil and Water Conservation merit badge is mandatory for the Eagle rank. Secretary of Agriculture Freeman makes annual conservation awards to Boy Scout councils with outstanding conservation records.

The Girl Scouts and Camp Fire Girls also have outstanding programs in natural beauty.

The local youth groups no doubt will turn to soil conservation districts for support in their conservation and beautification projects. Many districts have helped in the past by providing planting materials and other assistance for youth projects.—KARL F. MUNSON, *Program Leader in Recreation, Federal Extension Service, Washington, D. C.* ♦

Soil Workshop Helps Farmers Make Plans

SOIL and water management workshops are used by the Soil Conservation Service and Agriculture Extension Service in Wright County, Minn., to give farmers the knowledge and understanding of their soil and water resources needed to make their plans as soil conservation district cooperators.

Farm owners and operators, and at times persons such as bankers who work closely with farmers and representatives of other agricultural agencies, have been invited to participate.

Instruction is done by Orville J. Berry, SCS work unit conservationist, and Eugene Ellis, soil conservation agent, Agricultural Extension Service, University of Minnesota.

Participants receive an understanding of soils and land capabilities which helps them to make decisions in adjusting farm operations to meet changes in agriculture.

Berry and Ellis believe the workshop principle will help to further the knowledge of any group in such matters as watershed protection, resource conservation and development, cropland conversion, and other land use adjustment matters. ♦

Conservation District Publishes on Soils

TO INFORM land users about the value of available soils information, supervisors of the Strafford County Soil Conservation District, N.H., have published an attractive, easy-to-read brochure titled "We Need to Know More About Strafford County Soils."

Located in southeastern New Hampshire, Strafford County is undergoing rapid urban expansion with small industrial plants, housing developments, and recreation facilities occupying what was once forest and dairy farmland.

The brochure tells what the soil survey is, who can use the information, and suggests ways the survey and knowledge of it can be used.—SIDNEY A. L. PILGRIM AND E. MALCOLM STROM, *State Soil Scientist and Assistant State Conservationist, SCS, Durham, N.H.* ♦

New Publications

Warm Water Ponds for Fishing. BY W. W. NEELY, VERNE E. DAVISON, AND LAWRENCE V. COMPTON. *1965. USDA Farmers' Bul. 2210. 16 pp., illus.* This well-illustrated bulletin points out the importance of site, erosion control, proper stocking, adequate fertility, and weed control. It explains how to manage a warm-water pond for profitable fishing. The bulletin, however, is specific only for "warm-water" ponds, not for "cool-water" or "cold-water" ponds. It supersedes Farmers Bulletin 2094, "Managing Farm Fishponds for Bass and Bluegills."

Wild Rivers. *1965. U. S. Dept. of Agr. and U. S. Dept. of Interior 42 pp., illus.* This beautifully colored picture book, printed with private funds, illustrates the reasons for keeping at least a small stock of our rivers as we first knew them—wild and free-flowing—instead of dedicating all to our material welfare.

The book describes how the remaining wild ones provide the recreation and beauty America needs today.

A USDI and USDA special Wild River Study Team identified 73 rivers or river segments that appear to have wild characteristics.

Survival Or Surrender for Our Endangered Wildlife. *1965. U. S. Dept. Interior, Bur. of Sport Fisheries and Wildlife Circ. 223 16 pp., illus.* A well-illustrated booklet describing the drastic changes in abundance of wildlife in North America.

The USDI specialists classify the status of wildlife species and subspecies or races as: *Endangered* species, whose prospects of survival and reproduction are in immediate jeopardy; *rare* species, whose numbers are few throughout its range; *peripheral* species, whose occurrence in the United States is at the edge of its natural range; and *status questionable.* Thumbnail sketches are given of 15 principal species of concern.

The American Outdoors, Management for Beauty and Use. *1965. USDA Misc. Pub. 1000, 76 pp., illus.* Concepts of beauty as applied to landscape and some methods of improving the appearance of field and farm, range and woodland.

Soil Surveys

The following soil surveys have been published by the Soil Conservation Service in 1965:

Saunders County, Nebraska. BY JOHN A. ELDER, T. E. BEESLEY, AND W. E. MCKINZIE. *1965. 81 pp., illus.; maps 3.17 inches to the mile (1:20,000).*

Armstrong County, Texas. BY LOUIS L. JACQUOT, LUTHER C. GEIGER, BILLY R. CHANCE, VERLE D. WOODS, DONALD A. LEATH, AND LYNDON C. IMKE. *1965. 80 pp. illus.; maps 3.17 inches (1:20,000).*

Elliot County, Kentucky. BY BILLY C. WEISENBERGER, H. P. MCDONALD, AND H. A. WALLACE. *1965. 55 pp.; illus., maps 4 inches (1:15,840).*

Monroe County, West Virginia. BY JOHN L. GORMAN AND LEONARD S. NEWMAN. *1965. 114 pp., illus.; maps 3.17 inches (1:20,000).*

Meriwether County, Georgia. BY R. D. WELLS. *1965. 85 pp. illus.; maps 4 inches (1:15,840).*

Crow Wing County, Minnesota. BY H. F. ARNEMAN, LOWELL D. HANSON, H. P. HERMANSON, AND DAVID HILDE. *1965. 40 pp., illus.; maps 2 inches. (1:31,680) and 3.17 inches (1:20,000).*

Wayne County, Georgia. BY D. GRAY AYDELOTT, HERSCHEL L. PAULK, AND DANIEL D. BACON. *1965. 74 pp., illus. maps. 3.17 inches (1:20,000).*

Suwanee County, Florida. BY T. B. HOUSTON, M. W. HAZEN, JR., T. C. MATHEWS, AND G. A. BROWN. *1965. 101 pp., illus.; maps 3.17 inches (1:20,000).*

Reconnaissance Soil Survey of Fourteen Counties in Eastern Kentucky. BY HERMAN P. MCDONALD AND ROBERT L. BLEVINS. *1965. 72 pp., illus.; maps 1 inch (1:63,360).* Includes Bell, Breathitt, Clay, Floyd, Harlan, Johnson, Knott, Lawrence, Leslie, Letcher, Magoffin, Martin, Perry, and Pike counties.

From the Administrator:

The Enhancement of Natural Beauty

PRESIDENT Johnson, with strong supporting interest and assistance from the First Lady and their charming daughters, has focused the attention of Congress and the Nation on the needs and values of enhancement of natural beauty throughout the land.

He has assigned to Secretary Freeman the responsibility for Federal leadership for the beautification on privately owned rural lands of the countryside. That is a big order since nearly three-fourths of our land area is in farms, ranches, and other private holdings.

To carry out his assignment, the Secretary has issued a policy memorandum to guide the Department and each of its agencies in program development and action needed to make a major contribution to achieving a more beautiful America. In that policy guide the SCS is given a very substantial role which is being detailed in formal instructions within the Service.

In a very great measure the soil and water conservation work done by land owners and operators throughout the country with SCS assistance affects the rural landscape. Natural beauty is a normal product of effective soil and water conservation practices and sound resource use. The need for such a campaign as the President has initiated arises from the fact that in thousands of communities too many areas and too many watersheds are still marred by the scars of erosion and other unsightly results of misuse, overuse, and even abandonment.

Not all people who enjoy the esthetic benefits of soil and water conservation understand and appreciate what is being done. One of our big jobs is to inform our citizenship of these facts and to further enlighten them about what can be done for the good of the land and all the people.

And we in SCS must do more. Among ourselves in our day-to-day tasks we must be conscious of the values of natural beauty and build it into all our soil and water conservation work.

In providing technical assistance to individual land owners and operators we expect SCS conservationists and technicians to give full consideration to:

(1) Ways in which planning of land use and soil and water conservation measures can improve the beauty of the countryside, especially areas visible from roads and highways

(2) Greater use of conservation practices having natural beauty and landscaping values, especially on small odd areas, field borders, bogs, marshes, pond and stream margins, and wild areas

(3) The use of adaptable plant materials, including seedings, for conservation purposes which contribute to natural beauty wherever practicable

(4) Encouraging each soil conservation district cooperator to incorporate into his conservation plans provisions for roadside improvements, elimination of "eyesore" areas, and farm road beautification, including attention to the harmony of the farmstead with the natural setting.

In addition, all real properties under SCS control will have a plan for landscaping and maintaining the appearance of buildings. Insofar as we are able, we will offer advice on landscape improvement, as appropriate, to owners and managers of properties where SCS is a tenant.

State conservationists will include in their monthly narrative reports citations of special actions and accomplishments in achieving improved natural beauty by soil conservation districts and others as a result of SCS efforts.

A good beginning point for work units would be to urge conservation district officials and other local leaders to select for early attention "show window" or "target" areas along travelways where improvements toward rural beauty will be appreciated by the most people. Conservation work on such areas should create interest and participation among local leaders in rural and urban areas alike and result in substantial community pride across the Nation.

As I had the privilege of telling the Agriculture and Landscape panel of the White House Conference on Natural Beauty, there is one ingredient without which these rural beautification goals cannot be achieved. That ingredient is *people*.

Soil and water conservation districts and the small watershed projects provide effective devices through which the several segments of a community can work together on common resource problems. The new Resource Conservation and Development projects, because they embrace even larger geographic areas, provide an especially effective means of teamwork on a wide range or resource activities contributing to the enhancement of natural beauty.

We will help and encourage the leadership of all of these local conservation agencies to give greater emphasis to natural beauty in their programs and to participate actively in comprehensive planning that will make rural-urban cooperation more effective.

—D. A. WILLIAMS

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Conservation Gives Plenty of Scouting Activity

BOY Scout Troop 29 and conservation are synonymous in the Grand Traverse Region of Michigan and especially in Leelanau County, its home port.

In the 15 years since it was chartered, this troop has set a pace in conservation work hard to match in the scouting realm.

One project in particular stands out in their long list of achievements. That was the loading and hauling of 100 tons of rock for the Solon Creek Watershed Project. The rock was used in riprapping streambanks to anchor the soil and stop erosion of adjacent farmlands; for building deflectors to eliminate sandbars and silt, and in installing "V" dams to raise water levels and improve fish habitat.

Troop 29 boys built 3,855 bird feeders, houses, and kits in their work shop last year.

Take a look at what the boys did the past year! They hand-planted more than 7,000 pine trees; constructed 50 wood duck nesting boxes; built 152 martin houses, 4 litter barrels, 3,855 bird houses, feeders, and kits; showed conservation movies to 3,063 persons—all this in addition to their regular projects like the maintenance of a wildlife pond; maintenance of a cemetery; collection of canceled stamps for the YMCA; putting on "show and do" programs, periodically submitting construction plans of bird houses, feeders, etc., to the local newspapers; and assisting in making creel and game censuses for the Michigan Department of Conservation.

Keeping up with the supplies needed for these many diversified projects keeps Scoutmaster William Pritchard "humping," particularly since it's on a "no cost" basis. Industries in the Grand Traverse area save for him all their scrap lumber, wire, used sandpaper, nails, and paint.

With a membership of 46 boys from a start of 10, the unit has a continuous service record of 15 consecutive years, 638 consecutive weeks, 713 consecutive days and nights, and 150,749 total hours.—CHARLES M. SMITH, *Biologist, SCS, East Lansing, Mich.*

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